

## **Sudden Oak Death**

### ***Phytophthora ramorum***

*Phytophthora ramorum*, also known as Sudden Oak Death, is dispersed both through wind and through the soil. This disease affects certain oak species, resulting in bleeding cankers and other symptoms such as shoot tip dieback on affected hosts. Thousands of trees throughout California and Oregon have been lost. As of November 10, 2005, there are 38 proven host plants that carry and transmit *Phytophthora ramorum*, and 48 associated hosts. The list continues to expand, as more samples are collected and found to be positive for the disease.

The wide range of host plants includes, rhododendron, camellia, Douglas fir, viburnum, and lilacs, including other hardwood species and herbaceous plants. Effects of the disease can vary from leaf spots to complete mortality of some plants. This disease is capable of rapid disease spread, as increasing numbers of ornamental plants are shipped both nationally and internationally.

During the 2005 National Survey for Sudden Oak Death, three nurseries tested positive in Louisiana. A nursery in Tennessee was also confirmed with two positive *Phytophthora ramorum* samples while surveying for the disease.

The Montana Department of Agriculture surveyed nurseries and retail outlets throughout twelve counties. Over 430 samples were collected and tested for *Phytophthora ramorum*. All of the results were negative for the detection of the pathogen.

Often the disease is difficult to detect, therefore an accurate diagnosis requires testing of any suspicious plant material that appears to be infected.



Positive Rhododendron leaf. Other signs and symptoms may vary from plant to plant.

O'Brien, Joseph USDA Forest Service <http://www.forestryimages.com>

*Phytophthora ramorum* has been detected on these hosts

Coast Live Oak & CA Black Oak



Bay Laurel



Sample leaves

Rhododendron



Sample leaves

Toyon



Sample leaves

Buckeye



Sample leaves

Maple



Sample leaves

Madrone



Sample leaves

Tanoak



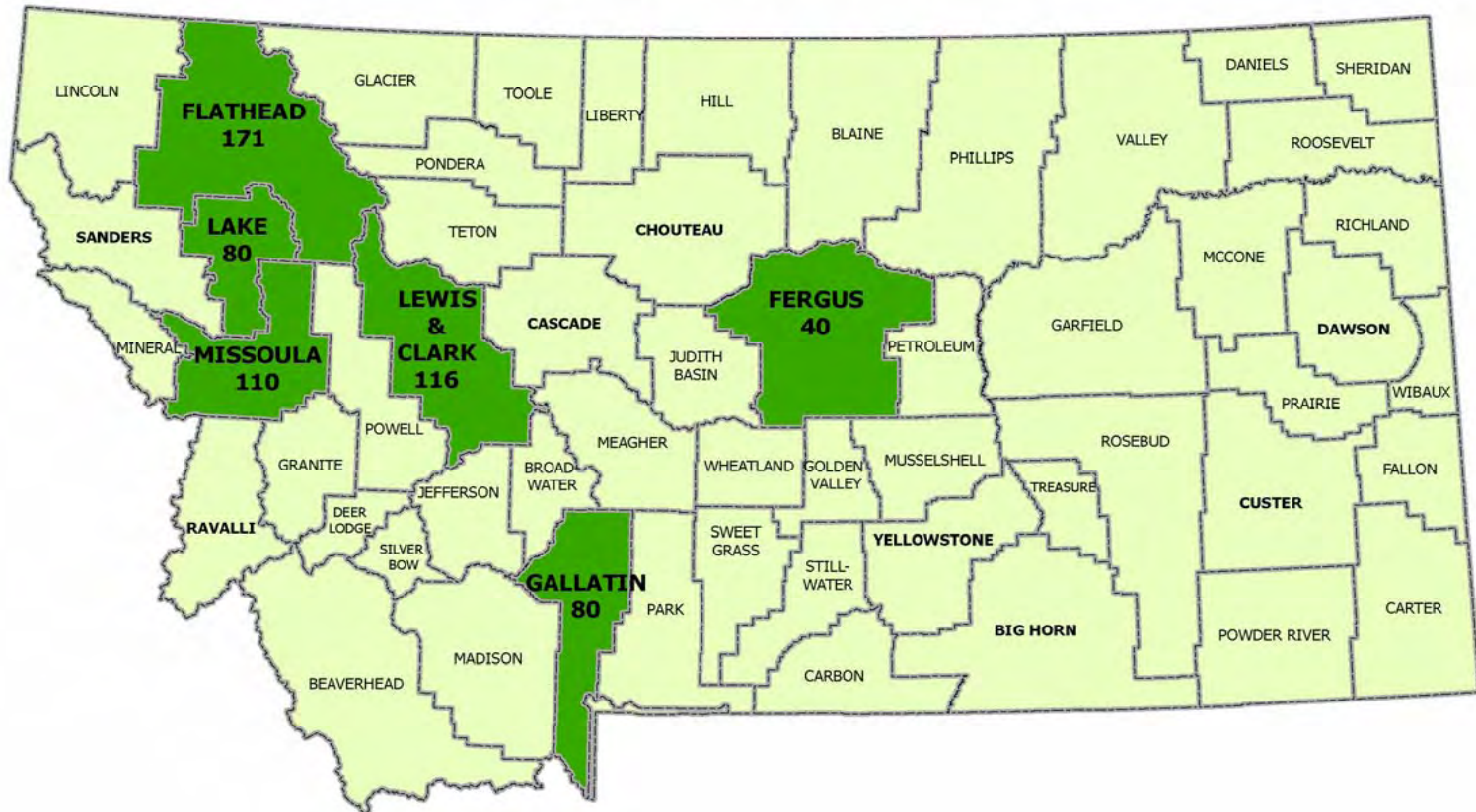
Sample leaves

Manzanita



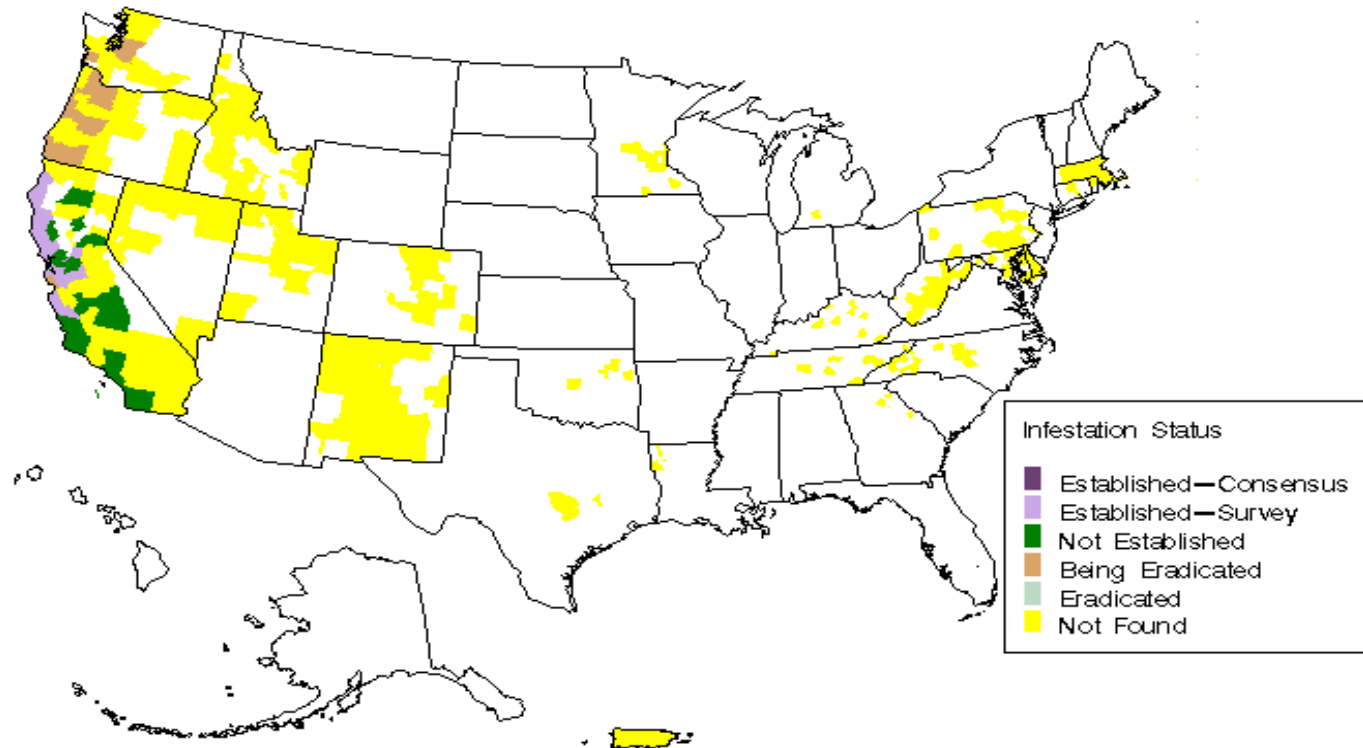
Sample dead branch- on the border between the dead and the live areas.

## Sudden Oak Death Samples Per County - 2005



Reported Status of  
**SUDDEN OAK DEATH MATING TYPE 2 , PHYTOPHTHORA RAMORUM**  
in US and Puerto Rico

Data retrieved from National Agricultural Pest Information System on 02/14/2006



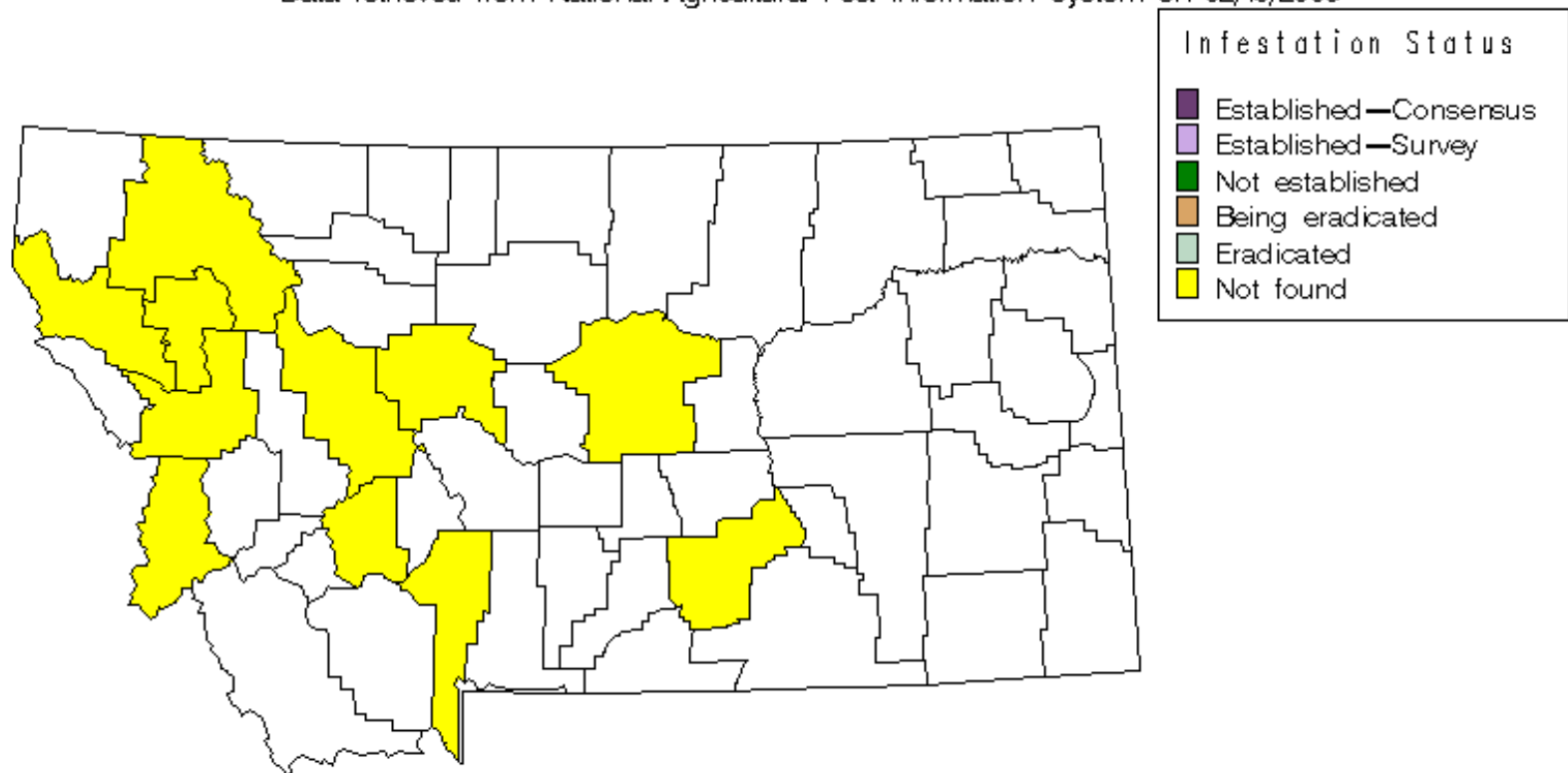
The Center for Environmental and Regulatory Information Systems does not certify the accuracy or completeness of the map. Negative data spans over last 3 years only.

# Sudden Oak Death

**SUDDEN OAK DEATH , PHYTOPHTHORA RAMORUM**

**in MONTANA**

Data retrieved from National Agricultural Pest Information System on 02/15/2006



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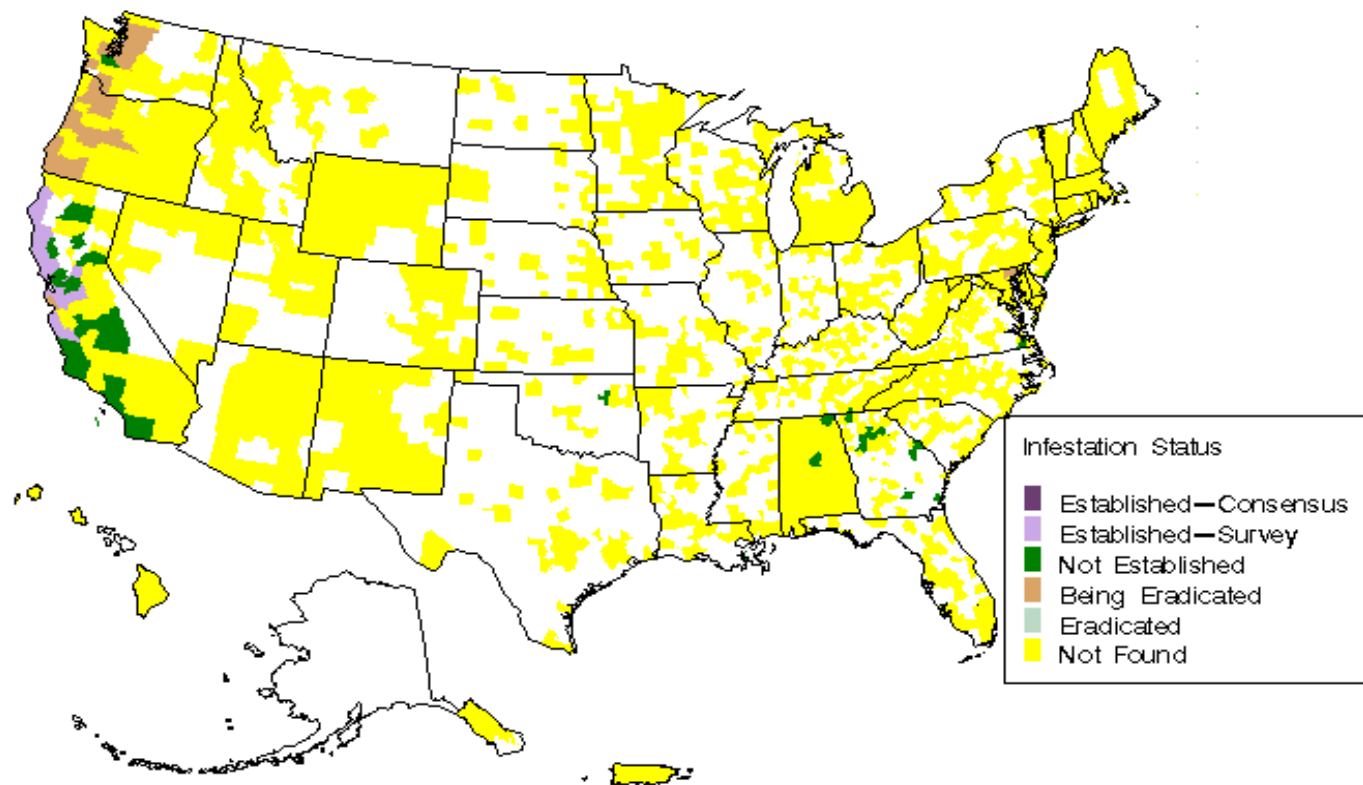


# Sudden Oak Death

**SUDDEN OAK DEATH , PHYTOPHTHORA RAMORUM**

**in US and Puerto Rico**

Data retrieved from National Agricultural Pest Information System on 02/15/2006



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